A Study of Savings Behavior on Financial Planning Among the Millennials

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Abstract

Reforms athwart the globe on implementation of defined contribution system and stress the role of individuals to assess their lifestyle and to equip themselves to ensure that they save adequately for their sunset years. Across developed countries, the issue of longevity and inadequate savings is becoming evident. Underfunded pensions and policy actions have failed to address the needs of the aging population. Though the goal clearly is retirement planning, the basic facet delves upon how an individual behaves in his earning years. The life cycle theory provides the various phases of one's transition through these phases. It is indeed the key to realize this in the context of the Millennials today in India, to capitalize on the demographic dividend. Upon this background, the aim of the study is to explore the influence of savings behavior on financial planning. The study was based on primary data through questionnaire. Factor analysis and hierarchical regression were used for the analysis. The study observes Income level as a significant demographic variable and justified a valid relationship between the variables among the Millennials.

Keywords: Behavioral factors, Financial Planning, Millennials, Personal Finance, Retirement Planning

JEL Classification: D14, G02

Introduction

Behavioral finance interprets the logic of investors affected from psychological traits and decisive behavior. Individual investors and movements of the market are two important aspects of behavioral finance. The traditional finance tenets originate with the Modern Portfolio Theory and the Efficient Market Hypothesis. Traditional finance presumes that the "Markets are efficient" and on the contrary behavioral finance assumes "Markets are not efficient and are difficult to beat". The decisions made by human beings are broadly the cognitive illusions and they can be characterized into two broad groups "illusions identified within the prospect theory" and "illusions identified within the heuristic decision process". Kahneman and Tversky developed this theory in 1979.

Although behavioral finance has gained more prominence across the globe, with the transition to the defined contribution system, the key question of whether the millennials prioritize savings behavior? And does it reflect on the process of financial planning? remains unanswered.

Review Of Literature

The review of Literature examined the different areas of behavioral finance towards financial planning (Ricciardi & Simon, 2015) discuss the concept and the principles of behavioral finance. The principles examined were Overconfidence, Cognitive Dissonance, Regret theory and Prospect Theory. They emphasized that anyone who studies behavior finance must first understand the concepts of Psychology, Sociology and Finance to be completely acquainted with it. The difference between Traditional Finance and Behavior Finance were also explained. A 'rule of Thumb' should be used by all investors so that they are much better prepared for risks while making investment decisions. The authors emphasized that an investor must create an investment checklist so as to understand how prepared they are to invest and will the investment decision be beneficial for them.

Bikas et. al.,(2013) examined non-professional investor's financial behavior in a theoretical perspective. They shed light on the research done by various scholars and researchers on behavior finance. The

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authors observed the emotional factors of investors and their psychological effects of investing.

(Statman, 2014), observed the interconnectedness between the theory, evidence, and practice of standard finance. They found that people are rational in standard finance compared to behavioral finance among normal people. They observed that behavioral portfolio theory was substituted against the mean-variance portfolio theory and CAPM was substituted for the behavioral asset pricing model. They compared the hard-to-beat markets vis-à-vis the efficient markets, a distinction was made in justifying why investors believed that it is easy to beat the market.

(Ritter, 2003), examined the cognitive biases and the possibility and the limits of an arbitrage opportunity. The applications of behavior finance on the limits of arbitrage opportunity was observed. Cognitive bias was classified into various patterns as Overconfidence, Heuristics Mental accounting, Representativeness, Framing, Conservatism, and the effect on Disposition.

(Bakar & Yi, 2016), have tried to understand the psychological factors that impact the decision making of the investors. The research was conducted in Malaysia and details of investor were picked from the Malaysian Stock Market. The authors observed the differences between Malaysia and other countries by examining the psychological factors impact on investor's decision making. They took investor's decision making as dependent variable and the independent variables were: overconfidence, conservatism, herding and bias availability.

(Hershey, Jacobs-Lawson, McArdle, & Hamagami, 2007), investigated to comprehend why Americans are not prepared for retirement. They attempted to find out the psychological characteristics of Americans who plan and save.

(Aren & Dinç, 2015), investigated the financial literacy, the risk perception, and its impact on the investment inclinations. Questionnaire was used for collecting data and the attributes obtained from the respondents were the personality, risk, financial literacy, investment choices, demography and dependent variables (portfolio, deposits and equity alternatives)

(Shanmugham & Ramya, 2012) have made an attempt to see if social factors have any impact on the investor's trading behavior. They have tried to see if social factors shape the behavioral factors in investors. Social factors are the external forces that influence the investor's decision making. Media, social interactions with friend and relatives and internet formed the major external influences. The family members, neighbors, and friends were the internal for the investment decisions.

(Grohmann, 2018) analyzed financial literacy of middleclass people living and their financial behavior. The survey was conducted in Bangkok, Thailand and the questions were to test the financial literacy. The target respondents were middle class population who were earning more than $10 a day.

(Venkataraman & Venkatesan, 2018), highlighted the key factors that influence financial literacy. Savings behavior, financial attitude and financial knowledge were significant in predicting financial literacy.

Various studies have been conducted to see if other factors like social factors, demography, literacy levels and gender have any impact on the decision-making skills of the investors.

Statement Of The Problem

Prior studies have shown and proved that behavior factors have played a major role in an individual's decision-making process. There was no in-depth examination of the savings behavior of the millennials and its effect on the financial planning. This study is conducted to find that influence and understand impact of savings behavior on their financial planning process.

Objectives Of The Study

1. Define the behavioral finance in the context of savings behavior.
2. Measure savings behavior and financial planning.
3. To observe the effect of demographic variables, savings behavior on financial planning.

Research Hypothesis

a) H_1: There is an effect of demographic variables on financial planning activities.

b) H_1: There is significant relationship of savings behavior and financial planning.

Research Methodology

Collection of data:

Data was collected through questionnaires. The existing scales for measurement of financial literacy and financial planning were obtained from the literature.

Tools used for analysis:

- **Descriptive Statistics** was used to group the respondent's profile.
- **Sample adequacy test** enabled the criteria for adequate responses.
- **Factor Analysis** was used to group the factors into categories to facilitate further analysis. SPSS Version 22 was used for the analysis after initial coding using MS-Excel.

- **Hierarchical Regression** facilitated to observe the influence of the variables.
- **Structural equation modeling** was used to observe the relationship with the error terms as the items for the constructs were obtained using various questions forming the items.

Data Analysis And Interpretation

The data was obtained through questionnaire designed using the scales established by the previous studies on savings behavior and financial planning respectively. Google forms were used to collect the responses and coding was done using MS-Excel.

The summary of descriptive statistics is presented below:

Table 1: Summary of Descriptive statistics.

Gender		**Gender**	
Male	Female	Under Grad.	Post Grad.
57	49	66	40
Marital Status		**Age group**	
Single	Married	22-35 Y ears	
46	60	Total respondents: 106	

The majority of the respondents was male, undergraduates, and married. The Age group of the respondents was restricted to 35 years, to reflect the millennials. The total number of respondents were 106.

Table 2

Table 4.2: KMO and Bartlett's Test		
KMO Sampling Adequacy		0.868
Bartlett's Test	Chi-Sq	1197.234
	Sig	0.000

The test for sample adequacy was performed using KMO test and a value of 0.868 supports that the sample is adequate. The same is observed from the significance level of the Bartlett's test. The variables were grouped by use of factor analysis. The summary of the analysis is presented in table 4.3 and four factors were highlighted in the study.

Table 3: Factor Analysis

Total Variance Explained		
Eigen Value of factors	% of Variance	Cumm.%
Factor 1- 7.573	23.006	23.006
Factor 2- 2.156	13.988	36.994
Factor 3- 1.292	10.362	47.356
Factor 4- 1.113	7.326	54.682

The factors were restricted to an Eigen value of more than one. Four factors were observed from the analysis representing a total of 54% variance.

Table 4: Rotated factor matrix

	Factor			
	1	2	3	4
FP1	.340	.406	.395	
FP2	.151	.436	.163	-329
FP3	.195	.284	.601	
FP4		.428	.541	.171
FP5	.210	.439	.297	
FP6	.100	.344	.123	.101
IN1	.121	.641	.260	
IN2	.197	.661		
IN3		.713		.209
RP1	.581	.128	.507	.21 1
RP2	.736	.139	.399	.153
RP3	.659		.548	.1 17
RP4	.453	.297	.293	.592
RP5	.646	.220		.287
RP6	.765	.204		
RP7	.794	.177	.220	.125
RP8	.782	193		.127
RP9	.305			.739
RP10	.471	.278	.292	.318

The above table provides the rotated matrix with Principal axis factoring as extraction method and Varimax as rotation method. It was observed that there were more cross loadings, the financial planning, retirement planning, Insurance adequacy and savings behavior were distinct with larger values and the two constructs were initial run for a regression analysis to observe relationship.

Table 5 Hierarchical Regression

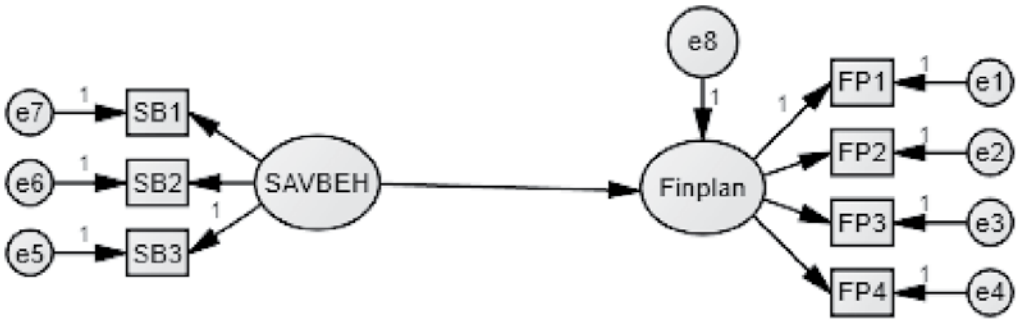
	Unstandardized Coefficients					
	B	Std. Error	Sig.	B	Std. Error	Sig.
(Constant)	2.309	0.364	0.005	1.099	0.382	0.005
Age	0.009	0.011	0.910	-0.001	0.010	0.910
Gender	0.163	0.167	0.165	0.206	0.148	0.165
Income	0.124	0.077	0.042	0.140	0.068	0.042
Behavior				0.514	0.088	0.000
R Square			0.232	R Square	0.382	0.523
Sig (F-Value)			0.098	Sig (F-Value)		0.000

a. Dependent Variable: FP

Hierarchical regression was performed, using the demographical variables in the first step to predict financial planning. Among the variables, Income level predicted 23% of financial planning and was observed to be significant ant 5% level of significance.

The second step, Savings behavior was observed significant at 1% level and a beta of 0.514 being positive and an overall significant model proves Income levels and savings behavior predicts and facilitates financial planning.

Figure 4.1 CFA models of Savings Behavior and Financial Planning



The case for a confirmatory model, was intended to capture the prediction with various items reflecting the respective constructs with the errors. Table 6 provides the estimates of the CFA.

Table 6: CFA - Regression Weights

			Estimate	S.E.	C.R.	P
Finplan	<---	Savbeh	0.493	0.133	3.711	***
FP1	<---	Finplan	1			
FP2	<---	Finplan	1.471	0.319	4.611	***
FP3	<---	Finplan	1.07	0.246	4.346	***
FP4	<---	Finplan	0.847	0.209	4.045	***
SB1	<---	Savbeh	1			
SB2	<---	Savbeh	0.779	0.136	5.74	***
SB3	<---	Savbeh	0.629	0.118	5.35	***

The regression weights observed all items loaded adequately to the constructs. Financial planning included 4 items and saving behavior was observed with 3 items. The savings behavior predicted the financial planning with a beta of 0.493.

Table 7: CFA - Fit Indices

Model	Chi-square	CMIN/DF	GFI	AGFI	CFI	RMSEA
Study model	22.659	1.743	0.949	0.891	0.952	0.08
Recommended value		Acceptable fit [1-4]	Greater than 0.05	Greater than 0.9	Greater than 0.9	Less than 0.10

The fit indices for the model were observed with Chi-Square value and CMIN/DF and they were observed of acceptable fit. The goodness of fit indices namely the GFI and CFI were also observed adequately above the 0.9 level. The AGFI was observed 0.891 was observed close to the criteria.

Discussion And Conclusion

The variables observed and drawn front the literature was observed overlapping in the context of financial knowledge, attitude towards savings, financial behavior and the same were observed in the factor analysis with cross loadings. Among the highest loaded items, the constructs framing the savings behavior and the actual financial planning were considered. The level of income was a key determinant among the demographic variables and the results matched with the prior literature. The incremental contribution of savings behavior was observed significant in predicting the financial planning activities. SEM provided the adequateness in terms of item loading of the constructs and the relationship between the variables in the study.

Limitations And Scope For Further Research

The study though provides the adequate role of savings behavior, needs to be checked with more variables to offer justification in terms of family size, dependents, elderly family members as they can hinder the savings behavior. As millennials the role towards acquiring materialistic assets dominate and they are seldom done using a loan, savings is hardly ever a behavior. A study on materialistic goals can provide more insights. The study though valid needs to be

validated through more responses to derive a conclusive decision among the millennials. The study of cohort behavior can give higher insights about the industry or sector specific measure that can aid the policy makers to enhance the savings behavior.

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